

[54] **COLOR IMAGE REPRODUCTION SHEET EMPLOYED IN PHOTOELECTROPHORETIC IMAGING**

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Related U.S. Application Data

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[30] **Foreign Application Priority Data**

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[57] **ABSTRACT**

A color image reproduction sheet for use in an electrophoretic color image reproducing apparatus. The sheet has a suspension layer having a white colored suspending medium and at least three differently colored photosensitive electrophoretic materials in the form of finely divided powder suspended in the white colored suspending medium, the three differently colored photosensitive electrophoretic material consisting essentially of cyan colored material which is principally photosensitive to red light, magenta colored material which is principally photosensitive to green light, and yellow colored material which is principally photosensitive to blue light. The suspension layer is supported on a base, so that when the sheet is passed between a substantially transparent first electrode and a second electrode which are spaced from and opposed to each other with the electrodes against the two opposite major surfaces of the suspension layer, respectively, with the transparent electrode against the free surface of the suspension layer, and a D. C. electric field is applied across the suspension layer between the electrodes, and the suspension layer is exposed to a color image through the transparent electrode, the D. C. electric field changes electrophoretically, in cooperation with the color image, the spatial distribution of the three differently colored photosensitive electrophoretic materials so that the optical reflective property of the suspension layer changes in accordance with the color image.

10 Claims, 13 Drawing Figures

